

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2003-SW-26-AD; Amendment 39-13198; AD 2003-12-13]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Agusta S.p.A. Model A109K2 Helicopters**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD) for Agusta S.p.A (Agusta) Model A109K2 helicopters. This action requires a visual check of each tail rotor blade (blade) for a crack; a visual inspection of each blade for a crack at specified intervals; and if necessary, a dye-penetrant inspection. Replacing any cracked blade with an airworthy blade before further flight is also required. This amendment is prompted by a report of a crack that occurred on an Agusta Model A109K2 blade. The actions specified in this AD are intended to detect fatigue cracks on the blades, which could result in loss of the blades and loss of control of the helicopter.

**DATES:** Effective July 11, 2003.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 11, 2003.

Comments for inclusion in the Rules Docket must be received on or before August 25, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2003-SW-26-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov. 229111, fax 39 (0331) 229605-222595. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Richard Monschke, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, Fort Worth, Texas 76193-0110, telephone (817) 222-5116, fax (817) 222-5961.

**SUPPLEMENTARY INFORMATION:** The Ente Nazionale per l'Aviazione Civile (ENAC), the airworthiness authority for Italy, notified the FAA that an unsafe condition may exist on Agusta A 109K2 helicopters. ENAC advises that checks/inspections are required to verify the presence of cracks on the blades, part number (P/N) 109-8132-01-107.

Agusta has issued Alert Bollettino Tecnico No. 109K-35, dated May 13, 2003 (ABT), which specifies checks/inspections to verify the possible presence of cracks on the upper and lower surfaces of blades having accumulated 1,500 or more operating hours. ENAC classified this ABT as mandatory and issued AD N.2003-169, dated May 16, 2003, to ensure the continued airworthiness of these helicopters in Italy.

This helicopter model is manufactured in Italy and is type certificated for operation in the United States under the provisions of 14 CFR 21.29 and the applicable bilateral agreement. Pursuant to the applicable bilateral agreement, ENAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the ENAC, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

This unsafe condition is likely to exist or develop on other Agusta Model A109K2 helicopters of the same type design registered in the United States. Therefore, this AD is being issued to detect fatigue cracks on the blades, which could result in loss of the blades and loss of control of the helicopter. This AD requires:

- Visually checking the upper and lower surfaces of the blades for cracks prior to each start of the helicopter engines.
- Visually inspecting the blades using a 5x or higher magnifying glass before the first flight of each day, and thereafter at intervals not to exceed 5 hours time-in-service (TIS), and anytime an increase in vibration levels occurs.
- Inspecting the blades using a dye-penetrant method after each of the visual inspections in which you used a 5x or higher magnifying glass if you are unable to determine by the visual inspection whether there is a crack.
- Replacing any cracked blade with an airworthy blade before further flight. The actions must be done in accordance with the ABT described previously. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability and structural integrity of the helicopter. Therefore, the visual checks, visual inspections, dye-penetrant inspections, if necessary, and replacing any cracked blade are required before further flight or within 5 hours TIS, as indicated, and this AD must be issued immediately.

The visual check required by paragraph (a) of this AD may be performed by an owner/operator (pilot) holding at least a private pilot certificate, but must be entered into the aircraft records showing compliance in accordance with 14 CFR 43.11 and 91.417(a)(2)(v). This AD allows a pilot to perform this check because it involves only a visual check for a crack in a surface of the blade, and can be performed equally well by a pilot or a mechanic.

The unsafe condition described previously is likely to exist or develop on other helicopters of the same type design registered in the United States. Therefore, this AD is being issued to detect a fatigue crack on the blades, which could result in loss of the blades and loss of control of the helicopter.

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's AD system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. Because we have now included this material in part 39, we no longer need to include it in each individual AD.

The FAA estimates that this AD will affect 5 helicopters, and the inspections and replacement will take approximately 2.5 work hours to accomplish at an average labor rate of \$60 per work hour. Required parts will cost approximately \$20,000 per helicopter. Based on these figures, the total estimated cost impact of the AD on U.S. operators is \$100,750, assuming all blades are replaced one time.

## **Comments Invited**

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their mailed comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 2003-SW-26-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

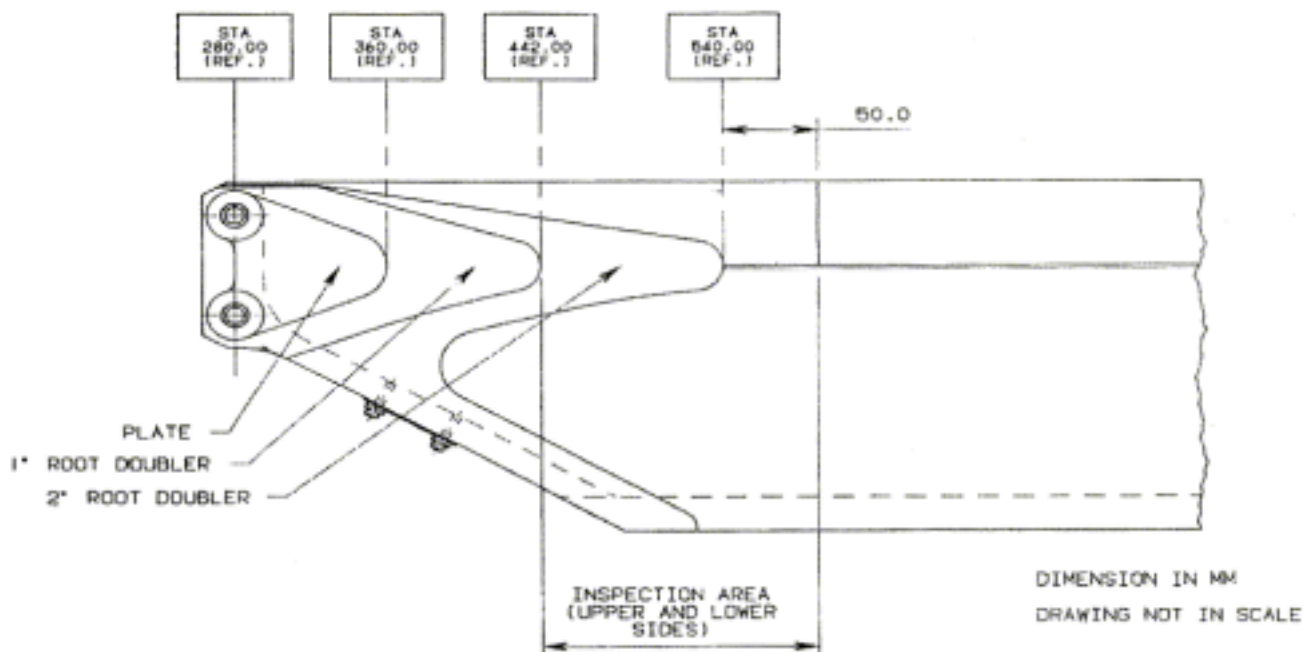
**2003-12-13 Agusta S.p.A.:** Amendment 39-13198. Docket No. 2003-SW-26-AD.

**Applicability:** Model A109K2 helicopters with tail rotor blades (blades), part number (P/N) 109-8132-01-107, having 1,500 or more hours time-in-service (TIS), installed, certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To detect a fatigue crack on the blades, which could result in loss of the blades and loss of control of the helicopter, accomplish the following:

(a) Before each start of the helicopter engines, visually check the upper and lower surfaces of each blade for a crack in the area depicted in Figure 1 of this AD. An owner/operator (pilot) holding at least a private pilot certificate may perform this check, but must enter compliance with this paragraph into the aircraft records in accordance with 14 CFR sections 43.11 and 91.417(a)(2)(v). See Figure 1:



**FIGURE 1**

**Note 1:** Paint irregularities on the blade may be due to a crack.

(b) Before the first flight of each day, and thereafter at intervals not to exceed 5 hours TIS, and anytime an increase in vibration levels occurs, inspect each blade for a crack using a 5x or higher magnifying glass in accordance with Part II of the Compliance Instructions of Alert Bollettino Tecnico No. 109K-35, dated May 13, 2003 (ABT) and Figure 1 of this AD.

(c) After each visual inspection using a 5x or higher magnifying glass and before further flight, if you are unable to determine by the visual inspection whether there is a crack, inspect each blade for a crack using a dye-penetrant method in accordance with Part II of the Compliance Instructions of the ABT and Figure 1 of this AD.

(d) If a crack is found, replace each cracked blade with an airworthy blade before further flight.

(e) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Safety Management Group, Rotorcraft Directorate, FAA, for information about previously approved alternative methods of compliance.

(f) Special flight permits will not be issued.

(g) The inspections and replacements, if necessary, shall be done in accordance with Agusta Alert Bollettino Tecnico No. 109K-35, dated May 13, 2003, except reporting findings of cracks to Agusta Service Engineering is not required. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Agusta, 21017 Cascina Costa di Samarate (VA) Italy, Via Giovanni Agusta 520, telephone 39 (0331) 229111, fax 39 (0331) 229605-222595. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on July 11, 2003.

**Note 2:** The subject of this AD is addressed in Ente Nazionale per l'Aviazione Civile (Italy) AD N.2003-169, dated May 16, 2003.

Issued in Fort Worth, Texas, on June 11, 2003.

Jerald E. Strentz,

Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 03-15447 Filed 6-25-03; 8:45 am]

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